Claims:

1. A flashlight comprising:

a lamp;

a power storage element;

a switch;

an electronic controller;

the controller having a switch input connected to the switch;

the controller being operable in response to the input to deliver power from the power storage element to the lamp; and

the flashlight having an elongated housing having the lamp at a first end and the switch at an opposed second end, and including at least two independent electrical paths between the first and second ends.

- 2. The flashlight of claim 1 wherein the switch is operably connected directly to the switch input.
- 3. The flashlight of claim 1 wherein the controller, lamp, and power storage element are connected to each other via a power circuit bypassing the switch, such that current for illuminating the lamp does not pass through the switch.
- 4. The flashlight of claim 1 wherein the switch is operable within a range of conditions and is operable to transmit an electrical state corresponding to a condition to the controller.
- 5. The flashlight of claim 1 wherein the switch has a plurality of different electrical states in addition to an off state, and wherein the electrical state is based on a degree of externally applied force.
- 6. The flashlight of claim 5 wherein the switch includes a plurality of separate contact elements each connected to a respective electrical component, and all operable to contact a common contact sequentially in response to movement of a switch actuator, such that the number of

separate contacts contacting the common contact is based on the degree of applied external force.

- 7. The flashlight of claim 6 wherein the switch includes at least a resistor, and the electrical states include a plurality of different resistance values.
- 8. A flashlight comprising:
 - an electronic controller;
 - a lamp connected to the controller;
 - a power storage element connected to the controller;
 - a switch connected to the controller;

the switch being operable within a range of conditions and is operable to transmit an electrical state corresponding to a condition to the controller; and

the switch having a plurality of different electrical states in addition to an off state, and wherein the electrical state is based on a degree of externally applied force.

- 9. The flashlight of claim 8 wherein the switch includes a plurality of separate contact elements each connected to a respective electrical component, and all operable to contact a common contact sequentially in response to movement of a switch actuator, such that the number of separate contacts contacting the common contact is based on the degree of applied external force.
- 10. The flashlight of claim 9 wherein the switch includes a resistor network, and the electrical states include a plurality of different resistance values.
- 11. A flashlight comprising:
 - a lamp;
 - a power storage element;
 - a switch;

an electronic controller connected to each of the power storage element, the lamp, and the switch;

the controller operable to provide momentary illumination of the lamp during an application of a first degree of force, and to cease illumination of the lamp in response to cessation of the force; and

the controller operable to provide sustained illumination of the lamp in response to application of a greater second degree of force, and to maintain illumination of the lamp in response to cessation of the force.

- 12. The flashlight of claim 11 wherein the controller is operable while providing sustained illumination after cessation of the force to cease illumination in response to a second application of force.
- 13. The flashlight of claim 11 wherein the switch includes a plurality of contacts, at least one of which having an associated resistor connected to present a net resistance to the controller based on the degree of force applied to the switch.

14. A flashlight comprising:

a lamp with a variable light output level up to a maximum output level;

a switch operable through a range of conditions ranging between a released position and a fully actuated condition;

a power storage element;

a dimmer facility operable to select a dimmed output level below the maximum output level; an electronic controller operably connected to each of the lamp, the switch, the power storage element, and the dimmer facility;

the controller operable to provide illumination of the lamp at the dimmed output level in response to an application of a first degree of force;

the controller operable to provide illumination of the lamp at the maximum output level in response to application of a greater second degree of force.

- 15. The flashlight of claim 14 including in response to application of the first degree of force for less than a selected duration, sustaining illumination of the lamp at the dimmed output level after cessation of the force.
- 16. The flashlight of claim 14 including in response to application of the second degree of force for less than a selected duration, sustaining illumination of the lamp at the dimmed output level after cessation of the force.
- 17. A method of operating a flashlight having a light source with variable light output up to a maximum output level, and a switch operable through a range of conditions ranging between a released position and a fully actuated condition, the method comprising:

establishing a dimmed level at an output less than the maximum level;

in response to actuating the switch to an intermediate condition between the released position and the fully actuated position, illuminating light source at the dimmed level; and in response to actuating the switch to the fully actuated condition, illuminating the light source at the maximum level.